

REMARKS

Claims 1, 3, 4, 6, and 8-20 are pending with claims 2 and 7 cancelled and 4, and 8-9 withdrawn.

Claim Amendments

Please note that Applicants have defined or amended ranges in claims 1, 6, 14, 15, and 20 to include a hyphen between end points to further clarify that the endpoints are included in the range. However, Applicants submit that unhyphenated ranges defined in other claims also include the endpoints in the range.

Claim Rejections Under 35 U.S.C §102(e) or 35 U.S.C §103(a)

Claims 1, 3, 6 and 19 stand rejected as allegedly anticipated by or, in the alternative, as allegedly obvious over U.S. Patent No. 6,136,500 (Kobayashi). Applicants have amended claims 1 and 6 to include the substantive features of, respectively, claims 2 and 7. Consequently, Applicants respectfully submit these rejections should be withdrawn.

Claim Rejections Under 35 U.S.C §103

Claims 2 and 7 stand rejected as allegedly being unpatentable over Kobayashi in view of Seimi Chemical Company, Ltd. (Product Literature). Although the action admits that Kobayashi fails to define the claimed surfactant, the action alleges it would be obvious for one of ordinary skill in the art to modify Kobayashi in view of the Product Literature to use the claimed surfactant. Moreover, the action alleges that it would be obvious to use the claimed surfactant because it would be readily available. Applicants respectfully traverse these rejections as applicable to currently amended claims 1 and 6.

Kobayashi discloses a resin composition comprising an alkali-soluble or alkali-low soluble resin and a photo acid generator, or an alkali-soluble resin and an alkali dissolution controller and a photo acid generator. See column 2, lines 43-59. Kobayashi also discloses a negative type resin composition comprising an alkali-soluble resin, a compound capable of cross-

linking an alkali-soluble resin in the presence of an acid, and a photo acid generator. See column 2, lines 60-66. Kobayashi also discloses that the positive resin composition and the negative resin composition can include surfactants, with non-ionic surfactants being preferred. See column 21, lines 53-65. However, Kobayashi fails to provide any teaching or suggestion to include a KH-40 nonionic surfactant. Particularly, there is no teaching or suggestion for one of ordinary skill in the art to add a KH-40 nonionic surfactant out of the countless nonionic surfactants that could be added or modified. See *In re Herschler*, 591 F.2d 693, 200 USPQ 711 (CCPA 1979).

Applicants note that although the Product Literature discloses the nonionic surfactant KH-40, the reference also discloses other nonionic surfactants, such as S381. S381 is used in comparative examples in the present specification. See Tables 8 and 9 at pages 12-13. Applicants respectfully submit that neither reference provides any motivation for one of skill in the art to select and use a surfactant of the present invention of formula (I), over other nonionic surfactants. Consequently, Applicants respectfully submit that the present claims are patentable over these references.

Moreover, the inclusion of a fluorochemical surfactant of the formula (1) in the resist composition of the present invention provides significant and unexpected results. Particularly, the use of such a surfactant provides superior effects on several properties, including frequency of coating flecks, range of film thickness variation, initial particle number, storage stability, focus margin and edge roughness as compared to the use of other fluorochemical surfactants (S-381 and SC-430). Compare results of Table 8 (surfactants of the present invention) versus results of Table 9 (comparative surfactants). As depicted, the surfactants of the present invention provide significant and unexpected properties to the inventive resist compositions that are not appreciated by either reference. Consequently, Applicants respectfully that the Examiner has ample legal authority to withdraw these rejections.

Claim 10 stands rejected under 35 U.S.C §103(a) as allegedly being unpatentable over Kobayashi in view of U.S. Patent No. 6,695,906 (Nishi). Claim 10 defines a resist composition which does not require the fluorochemical surfactant be of formula I now defined in claim 1. It is distinguished from the prior art based on a novel combination of novolak resin,

naphtoquinonediazide and fluorochemical surfactant which functions as defined in claim 10.

There is no evidence that Kobayashi discloses naphtoquinonediazide. The resist composition of Kobayashi is therefore, fundamentally distinct from the resist composition of Nishi such that one skilled in the art would not be motivated to combine the teachings of these references. More particularly, one skilled in the art would not be motivated to rely on the teachings of Kobayashi for the selection of a surfactant for use with a resist composition consistent with Nishi and one skilled in the art would not be motivated to rely on Nishi for the selection of a photoacid generator for a resist composition consistent with Kobayashi. Nishi describes suitable surfactants for their resist compositions at col. 9, lines 22-28 and Kobayashi discloses suitable photoacid generators for their resist compositions at col. 12-col 20. There is no evidence of motivation to deviate from the teachings within these disclosures to arrive at applicant's invention.

Even assuming that there is sufficient motivation to combine Kobayashi with Nishi and switch the components disclosed in each, Applicants respectfully submit there are no blazemarks or guideposts to lead one of skill in the art to the claimed invention. More particularly, Kobayashi discloses a host of different surfactants that can be combined to create a resist and there are no preferences or examples to lead one of ordinary skill in the art to the resist composition of claim 10 herein. See e.g., *In re Baird*, 29 U.S.P.Q.2d 1550 (CAFC 1994). Moreover, although Nishi discloses a resin composition comprising a photosensitive compound, in turn, comprising a quinonediazide sulfonate of a novolak resin (see column 3, lines 15-25), which can have a polyoxyethylene ether or fluorinated alkyl ester surfactant, col. 9, 22-25, the combined teachings provide no direction to select SURFLON from the surfactants disclosed by Kobayashi. Consequently, Applicants respectfully submit that these rejections should be withdrawn.

In addition, all the remaining claims in the application depend directly or indirectly from independent claims 1, 6, or 10. Thus, claims 11-18 are patentable over the cited art including U.S. Patent No. 5,849,808 (Schacht), at least due to their dependency, although further arguments may be made to distinguish claims 17-18 from Schacht.

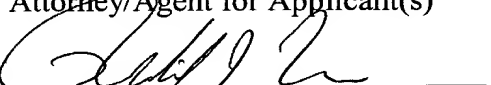
In view of the above remarks, favorable reconsideration is courteously requested. If there are any remaining issues which can be expedited by a telephone conference, the Examiner is courteously invited to telephone Counsel at the number indicated below.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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